

California Department of Food and Agriculture Pierce's Disease Program Pierce's Disease/Glassy-winged Sharpshooter Board January 15, 2004

Request for Research Project Suggestions NEW PROJECTS ONLY

The Pierce's Disease/Glassy-winged Sharpshooter (PD/GWSS) Board of the California Department of Food and Agriculture is accepting suggestions for new research projects on Pierce's disease and its vectors. Projects are being sought which will contribute to finding a solution to this serious disease of grapevines, and must be relevant to California conditions. Research contracts will be awarded for fiscal year 2004-05 (July 1, 2004 to June 30, 2005).

General Information

Project suggestion submissions should not exceed two pages in length. Suggestions will be reviewed by the PD/GWSS Board's Research Screening Committee. If a project suggestion passes this initial review, the authors will be requested to prepare and submit a detailed proposal for further consideration. Multiple submissions are acceptable.

NOTE REGARDING CURRENTLY FUNDED PROJECTS: Project suggestions need not be submitted for projects currently funded through CDFA's PD/GWSS Board. However, full proposals and progress reports will be required for these projects at a later date (April 2004) if funding is desired to continue in fiscal year 2004-05.

Timeline

•	Request for Project Suggestions Released	January 15, 2004
•	Project Suggestions Due	February 17, 2004
•	Full Proposals Requested	March 15, 2004
•	Full Proposals Due	April 19, 2004
•	Award Notification	June 1, 2004
•	Contracts Executed	June 30, 2004
•	Start Date for Projects	July 1, 2004

Who May Apply

Any individual or group affiliated with a university or governmental agency is eligible and encouraged to submit project suggestions.

Contents of Submitted Project Suggestions

Project suggestions should not exceed two pages in length. Please include the following information:

- 1. Project title, location, and duration.
- 2. Project leader(s) name, title, affiliation, mailing address, telephone number, and e-mail address.
- 3. Research area(s) please indicate the research area(s) being pursued by referencing the areas presented in **Table 1** (below).
- 4. The objectives of the proposed project.
- 5. The general approach to be used.
- 6. How the information generated from the project will contribute to finding a solution to Pierce's disease.

(Note: Budget specifics are not required in submissions.)

Review Process

All project suggestions will be reviewed by the PD/GWSS Board's Research Screening Committee. This committee is composed of representatives from federal and state governmental agencies, the University of California, and industry. Researchers whose project suggestions pass the initial screening process will be asked to submit full proposals of their projects for further consideration.

Due Date for Submissions

Project suggestions are due no later than 4:00 p.m. on February 17, 2004. Project suggestions that are incomplete, late, or exceed two pages in length will be eliminated from consideration. It is preferred that suggestions be submitted via e-mail, but submissions via fax or surface mail will also be accepted. All submissions must be received or postmarked by February 17, 2004.

Send Your Project Suggestions to:

Athar Tariq California Department of Food and Agriculture Pierce's Disease Program 2014 Capitol Avenue, Suite 109 Sacramento, CA 95814 Phone (916) 322-2804/ Fax (916) 445-2364

E-mail: atariq@cdfa.ca.gov

Table 1. Categories of Research Areas on Pierce's Disease and its Vectors**

1. Biology/Ecology of Crop

2. Biology/Ecology of Vectors

- 2.1 Vector Basic Biology (e.g., Genetics, Physiology, etc.)
- 2.2 Insect/Plant Interactions & Vector Population Ecology

In particular:

o GWSS within-plant feeding locations, including seasonal changes in feeding behavior.

3. Biology/Ecology of Xylella fastidiosa (Xf)

- 3.1 Genetics
- 3.2 Bacteria/Plant Interactions & Bacteria/Insect Interactions

In particular:

o Xylella attachment, binding, and movement within the plant.

3.3. Epidemiology

In particular:

- Standardizing monitoring methods and centralizing a statewide information management system (master database).
- o Correlating vector abundance with incidence of Pierce's disease.
- o Temperature profile for vector performance and for Pierce's disease development.

4. Monitoring/Action Thresholds

- 4.1 Vector Monitoring
- 4.2 Xf Monitoring

5. Control Strategies

- 5.1 Vector Biological Control
- 5.2 *Xf* Biological Control

In particular:

- Developing mechanisms for delivering anti-Xf chemicals or antagonistic microorganisms to existing vines to avoid replanting.
- 5.3 Vector Chemical Control
- 5.4 Xf Chemical Control
- 5.5 Cultural, Physical, & Behavioral Controls
- 5.6 Resistance to *Xf* Diseases

In particular:

- o Developing an effective promoter.
- Developing a stable plasmid vector for Xf.
- o Developing rootstock-based resistance, including a better understanding of the graft union.
- o Bioinformatics.
- o Rapid methods for screening genes/libraries.

6. Economics

In particular:

• Cost-benefit analyses of actual and proposed control strategies.

7. Other: Specify in Proposal

**Several research areas/questions were identified during the 2003 Pierce's Disease Research Symposium as being of particular interest - these are noted in italics under the specific research areas.